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United States Patent [19]

Link, Jr.

[11] **Patent Number:** **5,975,162**[45] **Date of Patent:** **Nov. 2, 1999**[54] **LIQUID DELIVERY VEHICLE WITH REMOTE CONTROL SYSTEM**[76] Inventor: **Clarence J. Link, Jr.**, 2648 SW. 111th St., Oklahoma City, Okla. 73170[21] Appl. No.: **09/054,221**[22] Filed: **Apr. 2, 1998**[51] Int. Cl.⁶ **B65B 1/04**[52] U.S. Cl. **141/231; 141/192; 222/627; 222/608; 239/172; 239/195**[58] **Field of Search** **239/231, 192, 239/98, 94, 172, 195; 137/456; 222/627, 626, 628, 608; 417/316**[56] **References Cited****U.S. PATENT DOCUMENTS**

4,817,870	4/1989 Dalton	239/172
5,012,974	5/1991 Johnson	239/172
5,823,235	10/1998 Alley et al.	141/231

OTHER PUBLICATIONS

ASCO Bulletin 8320 (Undated but admitted to be prior art).
ASCO Catalog 8320G182, p. 60 (Undated but admitted to be prior art).

Control Chief Corporation Catalog entitled "TeleMini Tele Chief Series" (Undated but admitted to be prior art).

ASCO Catalog, pp. 38 and 39 (Undated but admitted to be prior art).

ASCP Bulletin 8003G and 8202G (Undated but admitted to be prior art).

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[57] **ABSTRACT**

A delivery vehicle for delivering liquids to a storage location and a liquid delivery control system therefor. The apparatus comprises manual and remote actuation of a clutch controller for engaging and disengaging a clutch of the vehicle, remote and manual actuation of a throttle controller for opening and closing a throttle of the vehicle, actuation of a power take-off controller for engaging and disengaging a power take-off on the vehicle, and actuation of a valve controller for opening and closing an internal flow valve in a cargo tank on the vehicle. The apparatus also may include actuation of a reel controller for unwinding a liquid delivery hose from a reel and rewinding the hose on the reel. A method of delivering a liquid to a storage location is also disclosed.

47 Claims, 5 Drawing Sheets